CLAIMS:

1. An actuator, comprising:

a first electret layer having an electrical charge;

a first conductive layer residing on said first electret layer;

a moveable second electret layer, wherein said second electret layer is in a spaced apart relation to said first conductive layer in a quiescent state;

a second conductive layer in a spaced apart relation to said second electret layer in said quiescent state; and

a voltage source configured to selectively apply a voltage between said first and said second conductive layer.

2. The actuator as recited in claim 1, wherein said voltage applied between said first and said second conductive layer results in propelling said second electret layer to one of said first and said second conductive layers

3. The actuator as recited in claim 1, wherein said second electret layer has an electric charge of a same polarity as said electric charge of said first electret layer, wherein said second electret layer is operable for propelling toward said first electret layer in response to said voltage source applying a charge having an opposite polarity of said polarity of said charge of said first electret layer to said first conductive layer.

4. The actuator as recited in claim 1, wherein said second electret layer has an electric charge of a same polarity as said electric charge of said first electret layer, wherein said second electret layer is operable for propelling toward said second conductive layer in response to said voltage source applying a charge having an opposite polarity of said polarity of said charge of said first electret layer to said second conductive layer.

5. The actuator as recited in claim 1, wherein upon equalizing a potential difference between said first and said second conductive layers said second electret returns to its quiescent state.

6. The actuator as recited in claim 1, wherein said first and said second electret layers comprise mono-charged electrets.

7. The actuator as recited in claim 1, wherein said first and said second electret layers comprise polarized electrets.

8. The actuator as recited in claim 1, wherein said first electret layer comprises polarized electrets.

9. The actuator as recited in claim 1, wherein said second electret layer comprises polarized electrets.

10. The actuator as recited in claim 1, wherein said second electret layer undergoes deformation as a result of said voltage source selectively applying said voltage between said first and said second conductive layers.

11. The actuator as recited in claim 10, wherein said second electret layer is restored to an undeformed state upon equalizing a potential difference between said first and said second conductive layers.

12. The actuator as recited in claim 1, wherein frustration of total internal reflection of light occurs by means of said second electret layer.

13. The actuator as recited in claim 12, wherein a low refractive index gap between dielectric materials associated with said first and said second electret layers alternates between distances larger and smaller than one wavelength of light as a function of a potential difference selectively applied between said first and said second conductive layers thereby providing means to frustrate said total internal reflection of light and allow light to leap said gap into said second electret layer.

14. An actuator, comprising:

a first conductive layer;

a moveable electret layer, wherein said electret layer is in a spaced apart relation to said first conductive layer in a quiescent state ;

a second conductive layer in a spaced apart relation to said electret layer in said quiescent state; and

a voltage source configured to selectively apply a voltage between said first and said second conductive layer.

15. The actuator as recited in claim 14, wherein said voltage applied between said first and said second conductive layers results in propelling said electret layer to one of said first and said second conductive layers

16. The actuator as recited in claim 14, wherein said electret layer is operable for propelling toward said first conductive layer in response to said voltage source applying a charge having an opposite polarity of a polarity of a charge of said electret layer to said first conductive layer.

17. The actuator as recited in claim 14, wherein said electret layer is operable for propelling toward said second conductive layer in response to said voltage source applying a charge having an opposite polarity of a polarity of a charge of said electret layer to said second conductive layer.

18. The actuator as recited in claim 14, wherein upon equalizing a potential difference between said first and said second conductive layers said electret layer returns to its quiescent state.

19. The actuator as recited in claim 14, wherein said electret layer comprises mono-charged electrets.

20. The actuator as recited in claim 14, wherein said electret layer undergoes deformation as a result of said voltage source selectively applying said voltage between said first and said second conductive layers.

21. The actuator as recited in claim 20, wherein said electret layer is restored to an undeformed state upon equalizing a potential difference between said first and said second conductive layers.

22. The actuator as recited in claim 14, wherein frustration of total internal reflection of light occurs by means of said electret layer.

23. The actuator as recited in claim 22, wherein a low refractive index gap between dielectric materials associated with said first conductive layer and said electret layer alternates between distances larger and smaller than one wavelength of light as a function of a potential difference selectively applied between said first and said second conductive layers thereby providing means to frustrate said total internal reflection of light and allow light to leap said gap into said electret layer.